SAMSUNG

COLOUR TELEVISION

Owner's Instructions

Before operating the unit,
please read this manual thoroughly,
and retain it for future reference.

ON-SCREEN MENUS
PICTURE IN PICTURE (OPTION)
TELETEXT

SRS WOW

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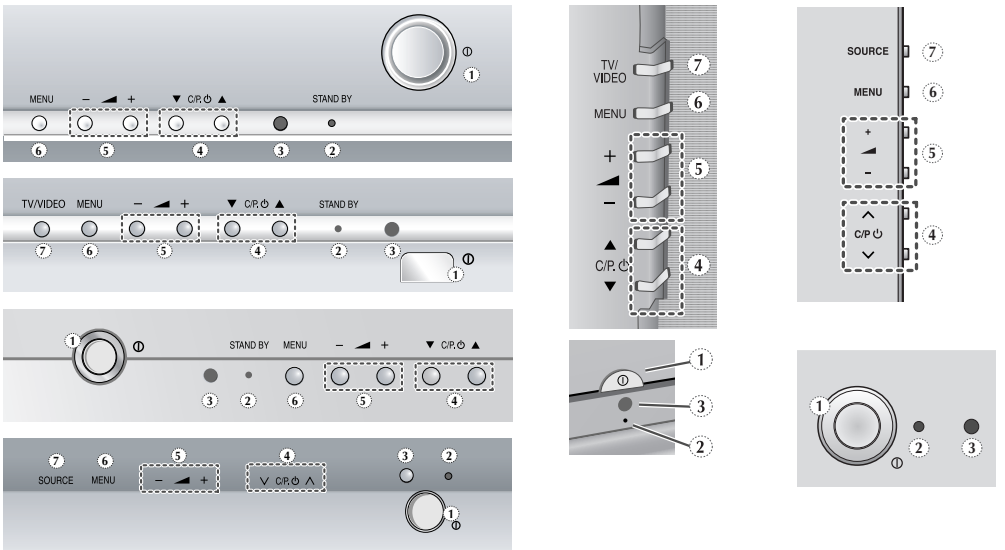
Symbols

Press **Important** **Note**

View of Your Television (depending on the model)

➢ The actual configuration on your TV may be different, depending on your model.

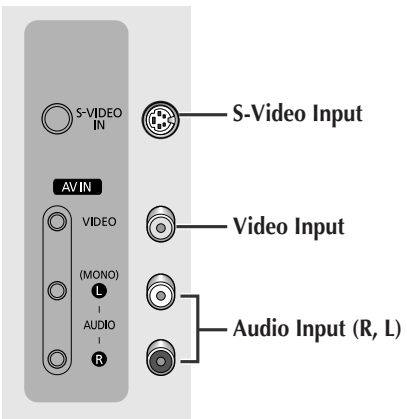
Control Panels



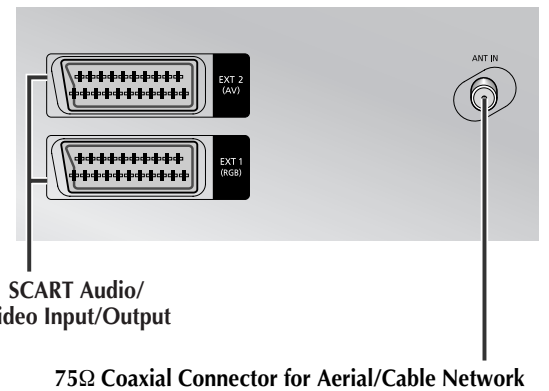
1) Power On/Off
2) Standby Indicator
3) Remote Control Sensor
4) Channel Selection
5) Volume Adjustment
6) Menu Display
7) Input source selection

Connection Panels

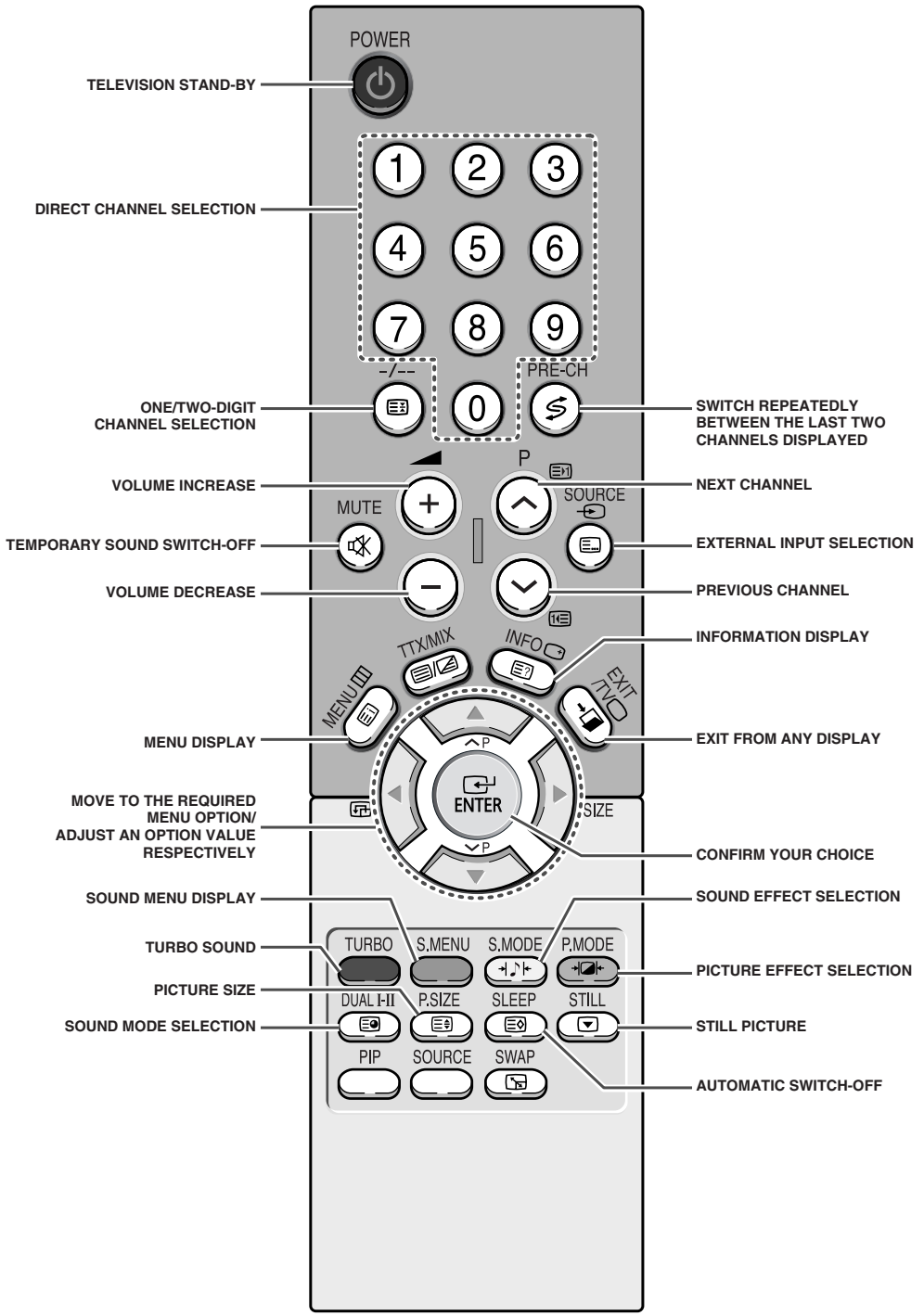
Side of the TV



Rear of the TV

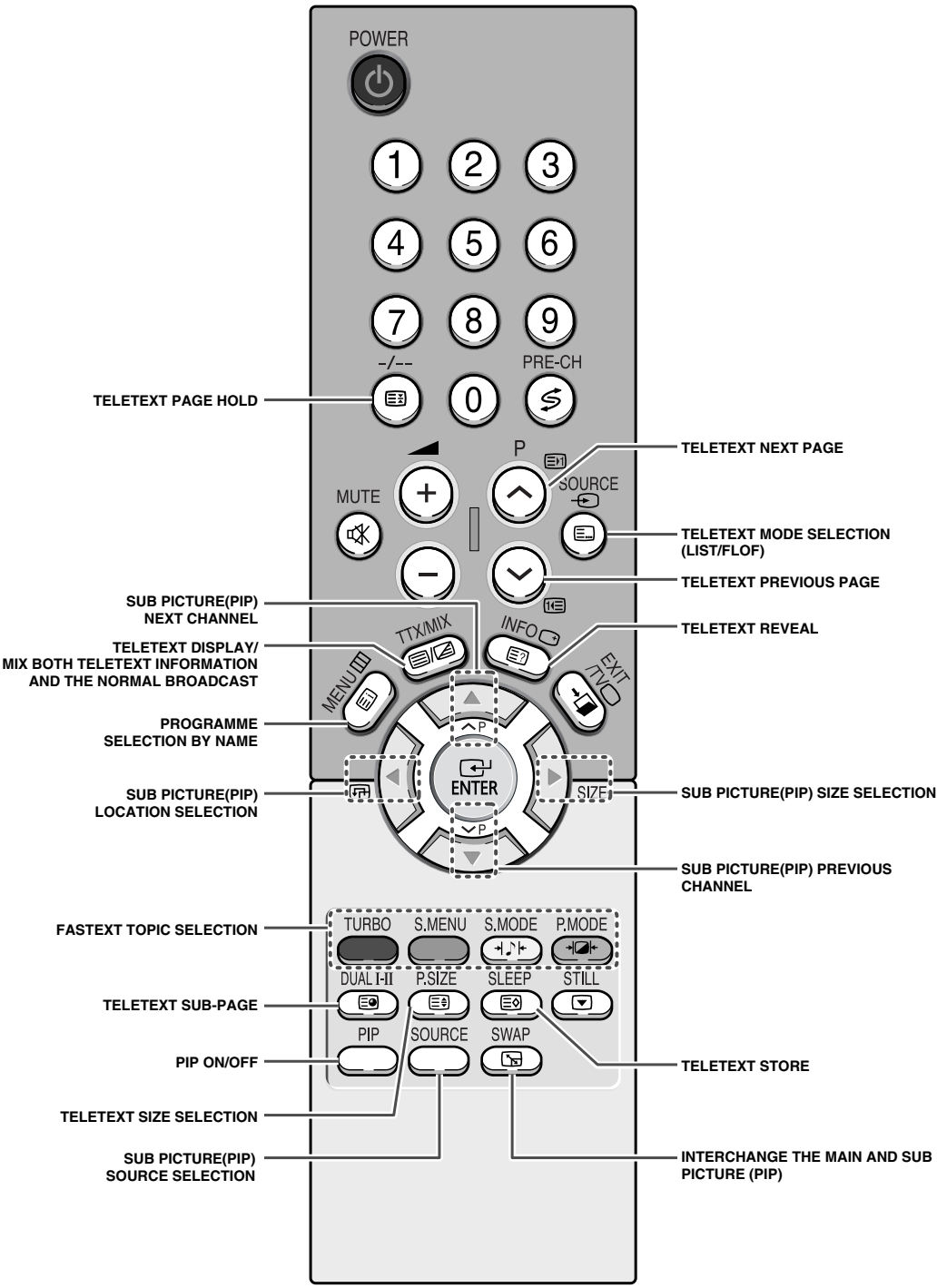


Infrared Remote Control

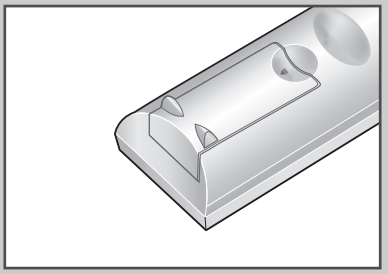


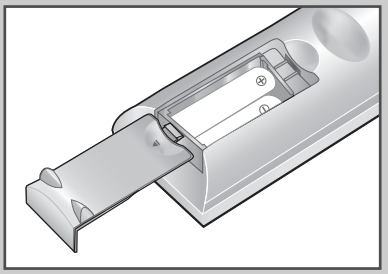
➢ *The performance of the remote control may be affected by bright light.*

Infrared Remote Control (continued)



Inserting the Batteries in the Remote Control





You must insert or replace the batteries in the remote control when you:

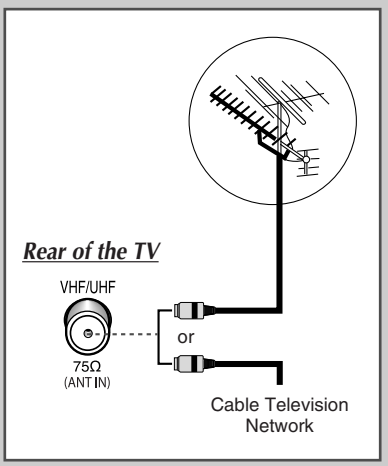
- ***Purchase the television***
- ***Find that the remote control is no longer operating correctly***

1 Remove the cover on the rear of the remote control by pressing the symbol (▼) downwards and then pulling firmly to remove it.

2 Insert two R03, UM4, "AAA" 1.5V or equivalent batteries taking care to respect the polarities:
- **–** on the battery against **–** on the remote control
- **+** on the battery against **+** on the remote control

3 Replace the cover by aligning it with the base of the remote control and pressing it back into place.

Connecting to an Aerial or Cable Television Network



To view television channels correctly, a signal must be received by the set from one of the following sources:

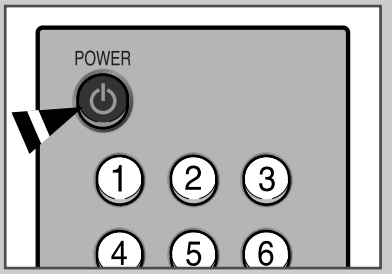
- ***An outdoor aerial***
- ***A cable television network***
- ***A satellite network***

1 In the first three cases, connect the aerial or network input cable to the 75Ω coaxial socket on the rear of the television.

2 If you are using an indoor aerial, you may need to turn it when tuning your television until you obtain a picture that is both sharp and clear.
For further details, refer to:
- "Storing Channels Automatically " on page 13
- "Storing Channels Manually" on page 15

Switching Your Television On and Off

The mains lead is attached to the rear of your television.



1 Plug the mains lead into an appropriate socket.

➢ The main voltage is indicated on the rear of the television and the frequency is 50 or 60Hz.

2 Press the "ⓘ" button (On/Off) on the front of the television.

Result: The Standby indicator on the front of the television lights up.

3 Press the **POWER** (⏻) button on the remote control to switch the television on.

Result: The programme that you were watching last is re-selected automatically.

➢ If you have not yet stored any channels, No clear picture appears. Refer to "Storing Channels Automatically" on page 13 or "Storing Channels Manually" on page 15.

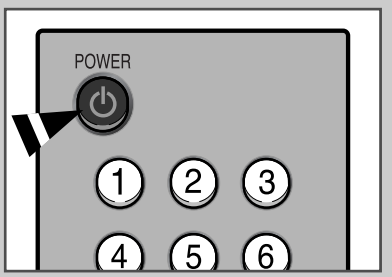
4 To switch your television off, press the "ⓘ" button (On/Off) again.

Placing Your Television in Standby Mode

Your television can be placed in Standby mode, in order to reduce:

- ***Power consumption***
- ***Wear of the cathode ray tube***

The Standby mode can be useful when you wish to interrupt viewing temporarily (during a meal, for example).



1 Press the **POWER** (⏻) button on the remote control.

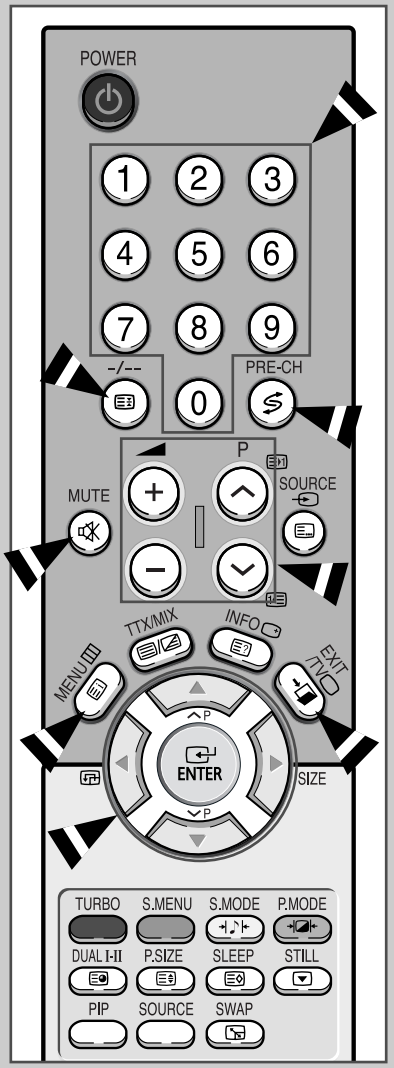
Result: The screen is turned off and the Standby indicator on the front of the television lights up in red.

2 To switch the television back on, simply press the **POWER** (⏻) button again.

➢ You can also switch on by pressing the **TV** (▭), **P** ⌃ or ⌄, or numeric buttons.

☛ Do not leave your television in Standby mode for long periods of time (when you are away on holiday, for example). Turn your television off by pressing the "ⓘ" button (On/Off) on the front of the television. It is best to unplug the set from the mains and aerial.

Becoming Familiar with the Remote Control



The remote control is used mainly to:

- ***Change channels and adjust the volume***
- ***Set up the television using the on-screen menu system***

The following table presents the most frequently used buttons and their functions.

Button	Viewing Function	Menu Function
⌃	Used to display the next stored channel.	–
⌄	Used to display the previous stored channel.	–
0 to 9	Used to display the corresponding channels.	
-/--	Used to select a channel numbered ten or over. Press this button, and the "**--**" symbol is displayed. Enter the two-digit channel number.	
PRE-CH	Press the **PRE-CH** button. The TV will switch to the last channel viewed. To quickly switch between two channels that are far apart, tune to one channel, then use the number button to select second channel. Then, use the **PRE-CH** button to quickly alternate between them.	
+	Used to increase the volume.	–
−	Used to decrease the volume.	–
MUTE	Used to switch the sound off temporarily. ➢ To turn the sound back on, press this button again, or press the + or − button.	
MENU	Used to display the on-screen menu system.	Used to return to the previous menu or normal viewing.
⌃⌄	–	Used to: ◆ Display a submenu containing selections for the current menu option ◆ Increase/decrease a menu option value
ENTER	–	Used to confirm your choice.
EXIT	–	Used to exit from the menu system and return to normal viewing directly.
TV	Used to switch the television on when it is in Standby mode.	

Plug & Play Feature

When the television is initially powered on, three basic customer settings proceed automatically and subsequently: setting the language, channel and clock.

1 If the television is in Standby mode, press the **POWER** (⏻) button on the remote control.

Result: The message **Plug & Play** is displayed. It flickers for a little while and then **Language** menu is automatically displayed.

2 Select the appropriate language by pressing the ▲ or ▼ button. Press the **MENU** (▥) button to enter the language.

Result: The message **Check antenna input.** is displayed.

➢ If any language is not selected on the **Language** menu, the **Language** menu will disappear about 30 seconds later.

3 Make sure that the antenna is connected to the TV. Press the ◀ or ▶ button.

Result: The **Auto Store** menu is displayed with **Country** is selected.

4 Select your country by pressing the ◀ or ▶ button. To search the channels, select **Search** by pressing the ▲ or ▼ button, and then press the ◀ or ▶ button. Press the **MENU** (▥) button to stop the search.

Result: The **Time** menu is displayed with **Clock** selected.

➢ Refer to “Storing Channels Automatically” on page 13.

5 Press the ◀ or ▶ button to move to the hour or minute. Set the hour or minute by pressing the ▲ or ▼ button.

➢ Refer to “Setting and Displaying the Current Time” on page 31.

6 When you have finished, press the **MENU** (▥) button.

Result: The message **Enjoy your watching.** is displayed, and then the channel which has been stored will be activated.

7 **If you want to reset this feature...**

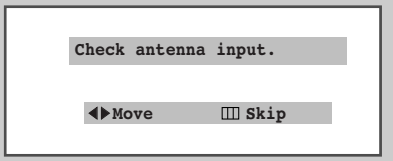
1 Press the **MENU** (▥) button.

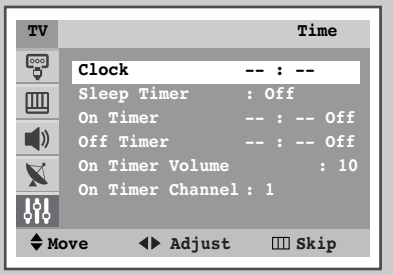
2 Press the ▲ or ▼ button to select **Setup**, and then press the **ENTER** (↵) button.

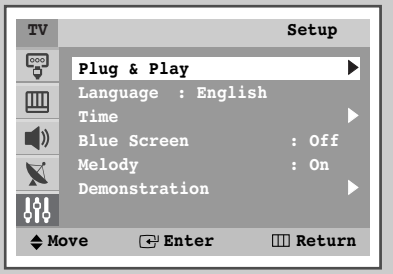
Result: The **Plug & Play** is selected.

3 Press the **ENTER** (↵) button again.

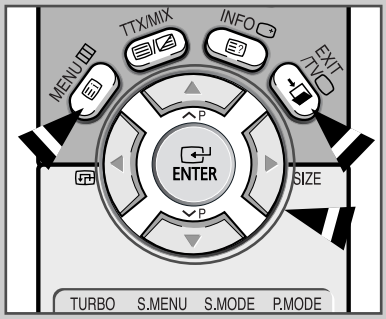
Result: This feature starts with the message **Plug & Play** is displayed.

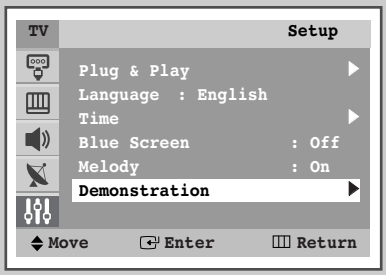






Viewing the Demonstration





To become familiar with the various menus provided by your television, you can view the inbuilt demonstration.

1 Press the **MENU** (▥) button.

Result: The main menu is displayed.

2 Press the ▲ or ▼ button to select **Setup**.

Result: The options available in the **Setup** group are displayed.

3 Press the **ENTER** (↵) button.

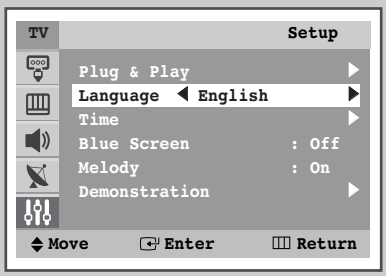
4 Press the ▲ or ▼ button to select **Demonstration**.

5 Press the **ENTER** (↵) button.

Result: Each of the menu options is displayed in turn.

➢ When you wish to exit from the demonstration, press the **EXIT** (→▯) button on the remote control.

Choosing Your Language



When you start using your television for the first time, you must select the language which will be used for displaying menus and indications.

1 Press the **MENU** (▥) button.

Result: The main menu is displayed.

2 Press the ▲ or ▼ button to select **Setup**.

Result: The options available in the **Setup** group are displayed.

3 Press the **ENTER** (↵) button.

4 Press the ▲ or ▼ button to select **Language**.

5 Press the **ENTER** (↵) button.

Result: The options available in the **Language** group are displayed.

6 Select the appropriate language by pressing the ▲ or ▼ button repeatedly.

Storing Channels Automatically

You can scan for the frequency ranges available to you (and availability depends on your country). Automatically allocated programme numbers may not correspond to actual or desired programme numbers. However you can sort numbers manually and clear any channels you do not wish to watch.

1 Press the **MENU** (▥) button.

Result: The main menu is displayed.

2 Press the ▲ or ▼ button to select **Channel**.

Result: The options available in the **Channel** group are displayed.

3 Press the **ENTER** (↵) button.

Result: The **Auto Store** selected.

4 Press the **ENTER** (↵) button again.

Result: The options available in the **Auto Store** group are displayed with **Country** is selected.

5 Select your country by pressing the ◀ or ▶ button. The countries are displayed in the following order: **Belgium** - **Germany** - **Spain** - **France** - **Italy** - **Netherlands** - **Sweden** - **Switzerland** - **United Kingdom** - **Others** - **Eastern Europe**

6 Press the ▲ or ▼ button to select **Search**.

7 Press the ◀ or ▶ button to start the search.

Result: The horizontal bar is displayed, and then channels are stored in an order which reflects their positions in the frequency range. Finally, the search will end automatically.

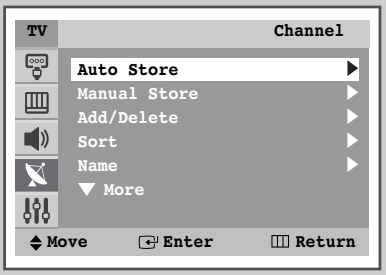
➢ To stop the search before it has finished, press the **MENU** (▥) button.

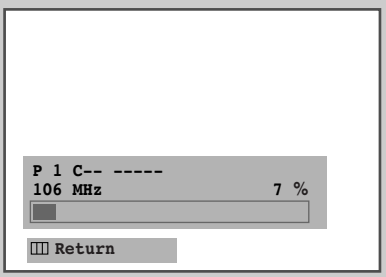
8 When searching and storing are complete, the **Sort** menu is displayed.

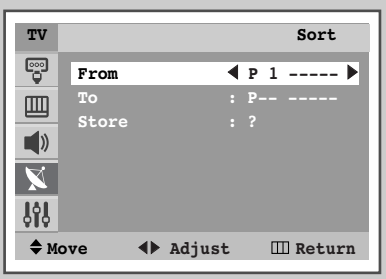
- To sort the stored channels into the desired numerical order, go to Step **6** of the "Sorting the Stored Channels" procedure on page 14.
- To exit from the channel store function without sorting the channels, press the **MENU** (▥) button repeatedly until the menus disappear.

9 When the channels have been stored, you can:

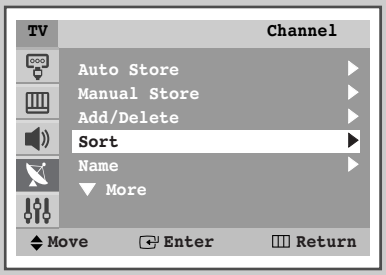
- Sort them in the order required (refer to page 14)
- Skip Unwanted Channels (refer to page 17)
- Assign a name to the stored channels (refer to page 18)
- Fine tune channel reception if necessary (refer to page 19)
- Activate the Digital Noise Reduction feature (refer to page 24)

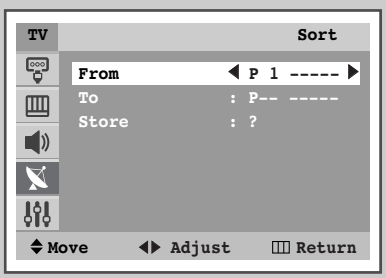


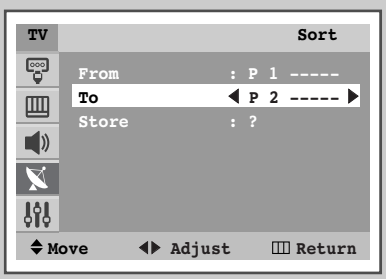


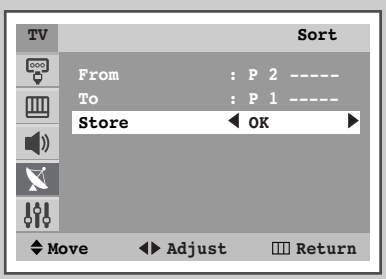


Sorting the Stored Channels









This operation allows you to change the programme numbers of stored channels. This operation may be necessary after using auto store. You can delete the channels you do not want to keep.

1 Press the **MENU** (▥) button.

Result: The main menu is displayed.

2 Press the ▲ or ▼ button to select **Channel**.

Result: The options available in the **Channel** group are displayed.

3 Press the **ENTER** (↵) button.

4 Press the ▲ or ▼ button to select **Sort**.

5 Press the **ENTER** (↵) button.

Result: The options available in the **Sort** group are displayed with **From** selected.

6 Select the channel number that you wish to change by pressing the ◀ or ▶ button repeatedly.

7 Press the ▲ or ▼ button to select **To**. Select the new channel number which you wish to identify by pressing the ◀ or ▶ button repeatedly.

➢ You can also select the channel number directly by pressing the numeric buttons (0~9).

8 Press the ▲ or ▼ button to select **Store**. Select **OK** to confirm the exchange of channel numbers by pressing the ◀ or ▶ button.

Result: The selected channel is exchanged with the one previously stored to the chosen number.

9 For all the channels to move to the required channel numbers, repeat steps **6** to **8** after selecting the **From** by pressing the ▲ or ▼ button.

Storing Channels Manually

You can store up to 100 television channels, including those received via cable networks.

When storing channels manually, you can choose:

- ***Whether or not to store each of the channels found***
- ***The programme number of each stored channel which you wish to identify***

1 Press the **MENU** (▥) button.

Result: The main menu is displayed.

2 Press the ▲ or ▼ button to select **Channel**.

Result: The options available in the **Channel** group are displayed.

3 Press the **ENTER** (↵) button.

4 Press the ▲ or ▼ button to select **Manual Store**.

5 Press the **ENTER** (↵) button.

Result: The options available in the **Manual Store** group are displayed with **Programme** is selected.

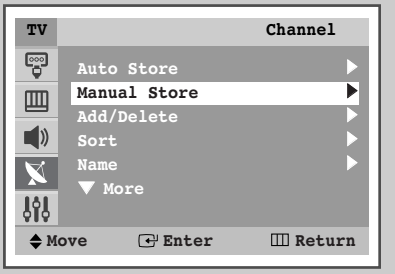
6 To assign a programme number to a channel, press the ◀ or ▶ button.

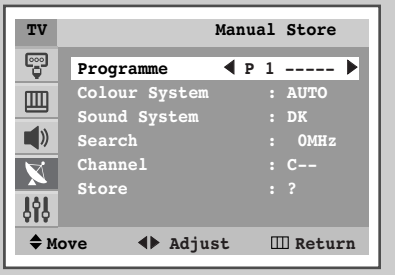
7 Press the ▲ or ▼ button to select **Colour System**. Select the broadcasting standard required by pressing the ◀ or ▶ button repeatedly.

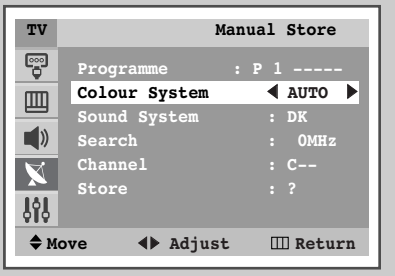
Result: The colour standards are displayed in the following order:
AUTO - PAL - SECAM - NT4.43

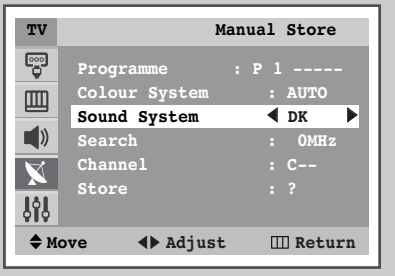
8 Press the ▲ or ▼ button to select **Sound System**. Select the sound standard required by pressing the ◀ or ▶ button repeatedly.

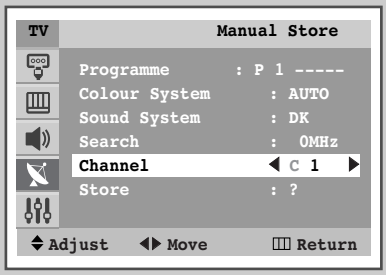
Result: The sound standards are displayed in the following order:
BG - DK - I - L

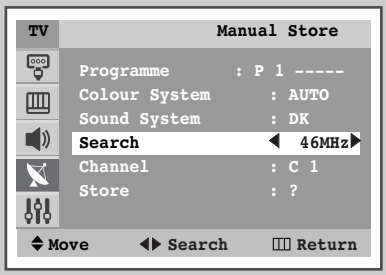


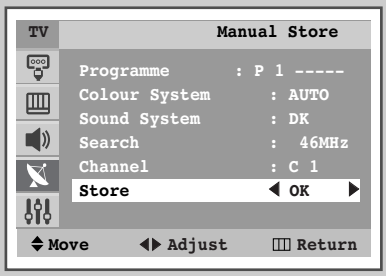












9 If you know the number of the channel to be stored, see the following steps.

- Press the ▲ or ▼ button to select **Channel**.
- Press the ▶ button.
- Press the ▲ or ▼ button to select **C** (Air channel) or **S** (Cable channel).
- Press the ▶ button.
- Press the ▲ or ▼ button to select the required number.

  ➢ You can also select the channel number directly by pressing the numeric buttons (0~9).

➢ If there is on sound or abnormal sound, re-select the sound system required.

10 If you do not know the channel numbers, select **Search** by pressing the ▲ or ▼ button. Press the ◀ or ▶ button to start the search.

Result: The tuner scans the frequency range until the first channel or the channel that you selected is received on your screen.

11 To store the channel and associated programme number, select **Store** by pressing the ▲ or ▼ button. Press the ◀ or ▶ button to select **OK**.

12 Repeat Steps **9** to **11** for each channel to be stored.

☛ ***Channel mode***

- **P** (Programme mode): When completing tuning, the broadcasting stations in your area have been assigned to position numbers from P00 to max P99. You can select a channel by entering the position number in this mode.
- **C** (Real channel mode): You can select a channel by entering the assigned number to each air broadcasting station in this mode.
- **S** (Cable channel mode): You can select a channel by entering the assigned number for each cable channel in this mode.

Skipping Unwanted Channels

You can exclude the channels you have chosen from the channels you scanned. When you scan through the stored channels, those you have chosen to skip are not displayed.

All of the channels that you do not specifically choose to skip are displayed during scanning.

1 Press the **MENU** (▥) button.

Result: The main menu is displayed.

2 Press the ▲ or ▼ button to select **Channel**.

Result: The options available in the **Channel** group are displayed.

3 Press the **ENTER** (↵) button.

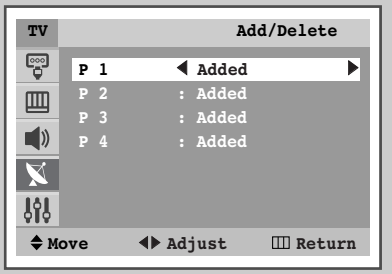
4 Press the ▲ or ▼ button to select **Add/Delete**.

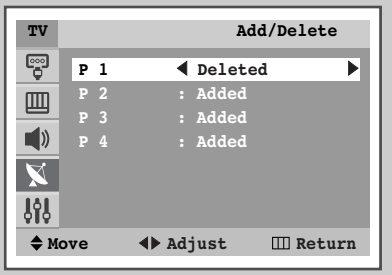
5 Press the **ENTER** (↵) button.

Result: The stored channels are displayed.

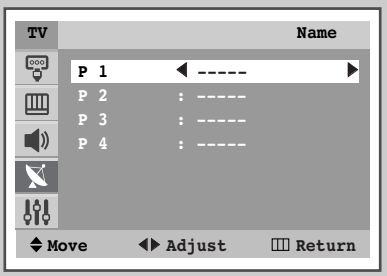
6 Press the ▲ or ▼ button to select the channel to add or erase. If necessary, select **Added** or **Deleted** by pressing the ◀ or ▶ button.

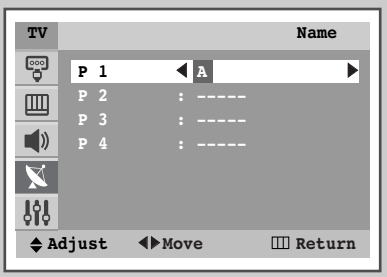
7 Repeat Step **6** for each channel to be added or erased.





Assigning Names to Channels





Channel names will be assigned automatically when channel information is broadcast. These names can be changed, allowing you to assign new names.

1 Press the **MENU** (▥) button.

Result: The main menu is displayed.

2 Press the ▲ or ▼ button to select **Channel**.

Result: The options available in the **Channel** group are displayed.

3 Press the **ENTER** (↵) button.

4 Press the ▲ or ▼ button to select **Name**.

5 Press the **ENTER** (↵) button.

Result: The current channels are displayed.

6 If necessary, select the channel to be assigned to a new name by pressing the ▲ or ▼ button.

7 Press the ◀ or ▶ button.

8 Press the ▲ or ▼ button to select a letter (A~Z), a number (0~9) or a symbol (-, space). Move on to the previous or next letter by pressing the ◀ or ▶ button.

9 Repeat Steps **6** to **8** for each channel to be assigned to a new name.

Fine Tuning Channel Reception

If the reception is clear, you do not have to fine tune the channel, as this is done automatically during the search and store operation. If the signal is weak or distorted, you may have to fine tune the channel manually.

1 Press the **MENU** (▥) button.

Result: The main menu is displayed.

2 Press the ▲ or ▼ button to select **Channel**.

Result: The options available in the **Channel** group are displayed.

3 Press the **ENTER** (↵) button.

4 Press the ▲ or ▼ button to select **Fine Tune**.

5 Press the **ENTER** (↵) button.

6 To obtain a sharp and clear picture and good sound quality, press the ◀ or ▶ button.

Result: The horizontal bar is displayed. Move the horizontal bar's cursor left or right by pressing the ◀ or ▶ button.

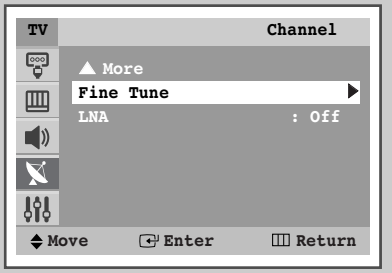
7 To store the fine tuning setting in the TV's memory, press the **ENTER** (↵) button.

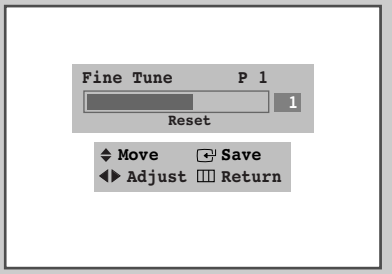
Result: Channel indicator turns into Red.

8 To erase adjusted picture or sound, select **Reset** by pressing the ▲ or ▼ button. Press the **ENTER** (↵) button.

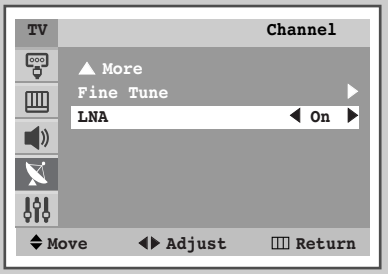
Result: Channel indicator returns to its original colour.

Depending on the model





Using the LNA (Low Noise Amplifier) Feature (depending on the model)



This function is very useful in the situation that the TV is used in weak signal. LNA amplifies the TV signal in the weak signal area; a low-noise preamplifier boosts the incoming signal. This feature is working only weak in signal condition, and this is memorized on the current channel, additionally.

1	Press the **MENU** (▥) button. Result: The main menu is displayed.
2	Press the ▲ or ▼ button to select **Channel**. Result: The options available in the **Channel** group are displayed.
3	Press the **ENTER** (↵) button.
4	Press the ▲ or ▼ button to select **LNA**.
5	To activate this feature, select **On** by pressing the ◀ or ▶ button.

➢ Setting the LNA option to "On" may produce worse picture quality due to the current channel's signal condition. Hence, apply LNA On/Off selectively according to the picture quality that is currently displayed.

Changing the Picture Standard

You can select the type of picture which best corresponds to your viewing requirements.

1 Press the **MENU** (▥) button.

Result: The main menu is displayed.

2 Press the ▲ or ▼ button to select **Picture**.

Result: The options available in the **Picture** group are displayed.

3 Press the **ENTER** (↵) button.

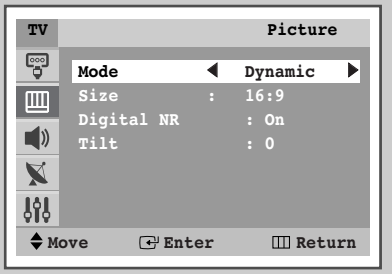
Result: The **Mode** is selected.

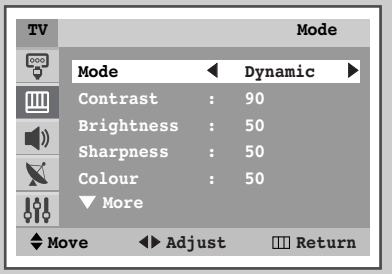
4 Select the required picture mode by pressing the ◀ or ▶ button repeatedly.

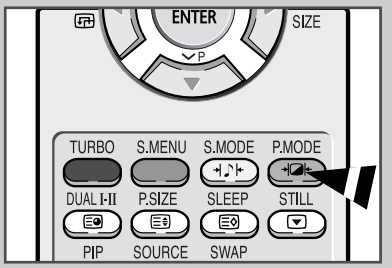
Result: The following picture mode are available:

Dynamic - Standard - Movie - Custom

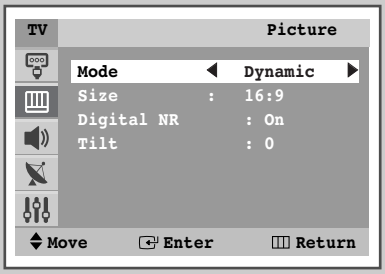
➢ You can also set these options simply by pressing the **P.MODE** (◪ ; Picture Mode) button.

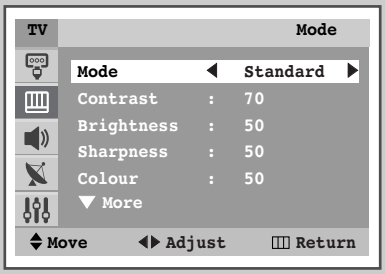


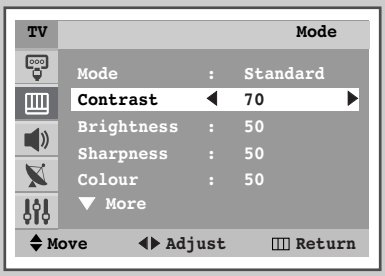


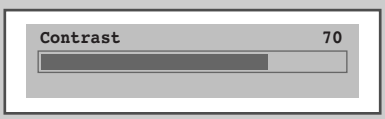


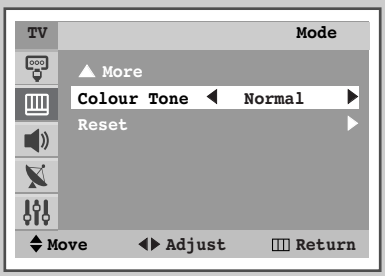
Customizing the Picture Settings

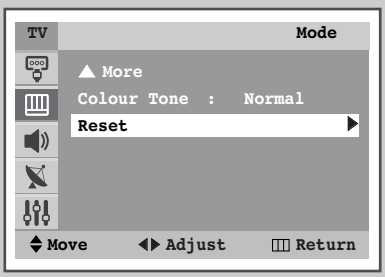












Your television has several settings which allow you to control the picture quality.

1 Press the **MENU** (▥) button.

Result: The main menu is displayed.

2 Press the ▲ or ▼ button to select **Picture**.

Result: The options available in the **Picture** group are displayed.

3 Press the **ENTER** (↵) button.

Result: The **Mode** is selected.

4 Select the required picture mode by pressing the ◀ or ▶ button repeatedly.

Result: The following picture mode are available:

Dynamic - **Standard** - **Movie** - **Custom**

5 Press the ▲ or ▼ button to select the option (**Contrast**, **Brightness**, **Sharpness**, **Colour**, or **Tint**-NTSC only) to be adjusted. Press the ◀ or ▶ button. These options are for each mode adjusted (**Dynamic**, **Standard**, **Movie**, or **Custom**).

Result: The horizontal bar is displayed. Press the ◀ or ▶ button until you reach the optimal setting.

6 Press the **MENU** (▥) button.

Result: The available options are displayed again.

7 Press the ▲ or ▼ button to select **Colour Tone**. Select the required option by pressing the ◀ or ▶ button repeatdly.

Result: The following colour tones are available:

Cool2 - **Cool1** - **Normal** - **Warm1** - **Warm2**

8 To return to the factory defaults, select **Reset** by pressing the ▲ or ▼ button. Press the ◀ or ▶ button.
The reset function is set for each mode (**Dynamic**, **Standard**, **Movie**, or **Custom**).

Result: The previously adjusted settings will be reset to the factory defaults.

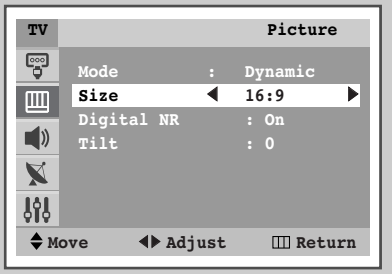
➢ The television has an "automatic degaussing" system that is activated if magnetic interference is present. To degauss the television screen, switch power off by pressing the " ⏻ " (On/Off) button on the front panel. (Refer to "Automatic Degaussing to Remove Colour Patches" on page 45.)

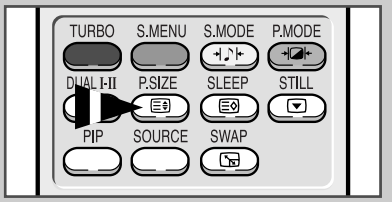
Selecting the Picture Size (depending on the model)

You can select the picture size which best corresponds to your viewing requirements simply by pressing the "P.SIZE ( )" button. Depending on the model, the following picture sizes are available:

- **Normal**, **Zoom1**, **Zoom2**, **16:9**
- **16:9**, **Panorama**, **Zoom1**, **Zoom2**, **4:3**, **Auto Wide**

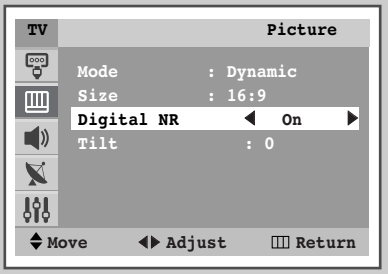
➢ Lifting is available in the **Zoom1** or **Zoom2** mode by pressing the ▲ or ▼ button.





1	Press the **MENU** ( ) button. Result: The main menu is displayed.
2	Press the ▲ or ▼ button to select **Picture**. Result: The options available in the **Picture** group are displayed.
3	Press the **ENTER** ( ) button.
4	Press the ▲ or ▼ button to select **Size**.
5	Press the ◀ or ▶ button to select the picture size.

Selecting the Digital NR



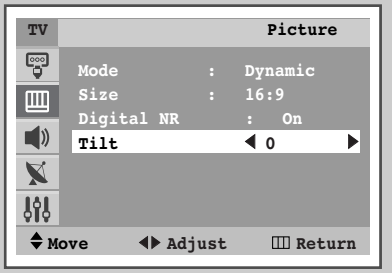
If the signal received by your television is weak, you can activate this feature to reduce any static and ghosting that may appear on the screen.

1	Press the **MENU** (▥) button. Result: The main menu is displayed.
2	Press the ▲ or ▼ button to select **Picture**. Result: The options available in the **Picture** group are displayed.
3	Press the **ENTER** (↵) button.
4	Press the ▲ or ▼ button to select **Digital NR**.
5	To activate this feature, select **On** by pressing the ◀ or ▶ button.

Using the Tilt Control Feature

If you find that the picture received is slightly tilted to one side, you can adjust the tilt setting.

Depending on the model

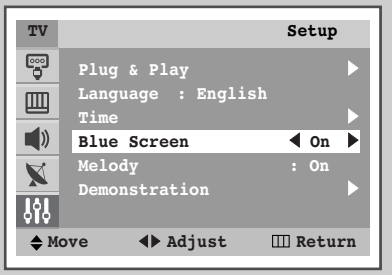


1	Press the **MENU** (▥) button. Result: The main menu is displayed.
2	Press the ▲ or ▼ button to select **Picture**. Result: The options available in the **Picture** group are displayed.
3	Press the **ENTER** (↵) button.
4	Press the ▲ or ▼ button to select **Tilt**.
5	Press the ◀ or ▶ button to reach the required setting (**–7** to **+7**).

Setting the Blue Screen

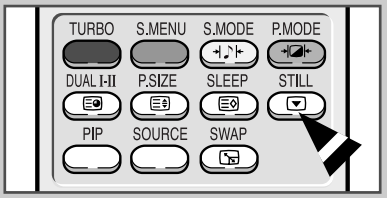
If no signal is being received or the signal is very weak, a blue screen automatically replaces the noisy picture background.

If you wish to continue viewing the poor picture, you must set the "Blue Screen" mode to "Off".



1	Press the **MENU** (▥) button. Result: The main menu is displayed.
2	Press the ▲ or ▼ button to select **Setup**. Result: The options available in the **Setup** group are displayed.
3	Press the **ENTER** (↵) button.
4	Press the ▲ or ▼ button to select **Blue Screen**.
5	To activate this feature, select **On** by pressing the ◀ or ▶ button.

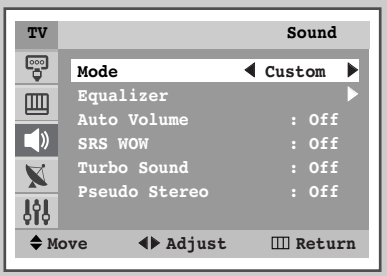
Freezing the Current Picture

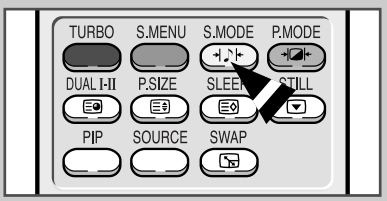


You can freeze the picture when watching a television programme simply by pressing the "STILL (▣)" button.

➢ To return to normal viewing, press this button again.

Changing the Sound Standard





You can select the type of special sound effect to be used when watching a given broadcast.

1 Press the **MENU** (▥) button.

Result: The main menu is displayed.

2 Press the ▲ or ▼ button to select **Sound**.

Result: The options available in the **Sound** group are displayed.

3 Press the **ENTER** (↵) button.

Result: The **Mode** is selected.

4 Select the required sound effect by pressing the ◀ or ▶ button repeatedly.

Result: The following sound effects are available:

Standard - Music - Movie - Speech - Custom

➢ You can also set these options simply by pressing the **S.MODE** (♪; Sound Mode) button.

Adjusting the Sound Settings

The sound settings can be adjusted to suit your personal preferences.

1 Press the **MENU** (▥) button.

Result: The main menu is displayed.

2 Press the ▲ or ▼ button to select **Sound**.

Result: The options available in the **Sound** group are displayed.

3 Press the **ENTER** (↵) button.

4 Press the ▲ or ▼ button to select **Equalizer**.

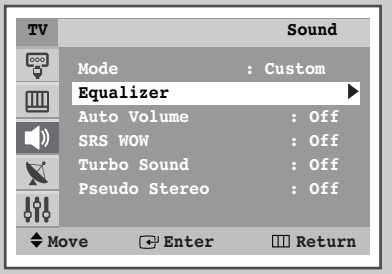
5 Press the **ENTER** (↵) button.

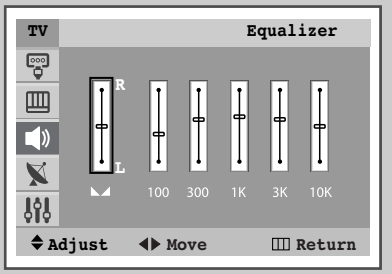
Result: The options available in the **Equalizer** group are displayed.

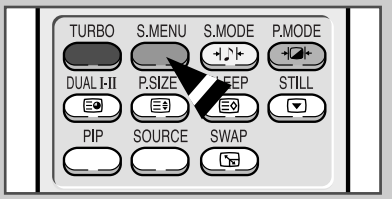
➢ You can also display this group simply by pressing the **S.MENU** button.

6 Select the option to be adjusted by pressing the ◄ or ► button. Press the ▲ or ▼ button to reach the required setting.

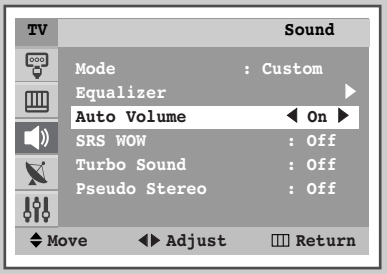
➢ If you make any changes to these settings, the sound standard is automatically switched to **Custom**.

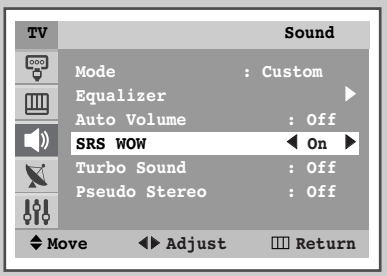


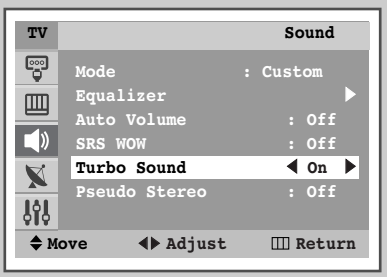


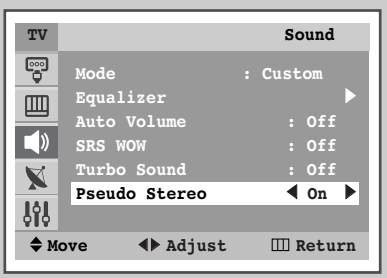


Extra Sound Settings (depending on the model)









◆ ***Auto Volume***

Each broadcasting station has its own signal conditions, and so it is not easy for you to adjust the volume every time the channel is changed. This feature lets you automatically adjust the volume of the desired channel by lowering the sound output when the modulation signal is high or by raising the sound output when the modulation signal is low.

◆ ***SRS WOW***

Emphasizes midrange and bass and provides a simulated surround-sound experience.

◆ ***Turbo Sound***

This feature suitably emphasizes both higher and lower bands of sound (and includes other effects).

You can enjoy more magnificent and dynamic sound when watching music, movie, or other channel simply by pressing the **TURBO** button.

◆ ***Pseudo Stereo***

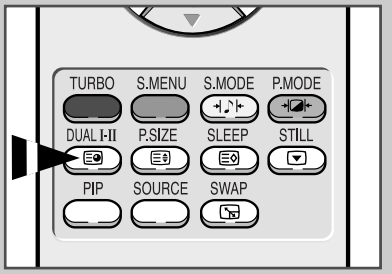
This feature converts a monaural sound signal into two identical left and right channels. Once the **Pseudo Stereo** is set to **On** or **Off**, these settings apply to the sound effects such as **Standard**, **Music**, **Movie**, and **Speech**.

1	Press the **MENU** (▥) button. Result: The main menu is displayed.
2	Press the ▲ or ▼ button to select **Sound**. Result: The options available in the **Sound** group are displayed.
3	Press the **ENTER** (↵) button.
4	Select the required option (**Auto Volume**, **SRS WOW**, **Turbo Sound** or **Pseudo Stereo**) by pressing the ▲ or ▼ button.
5	To activate each feature, select **On** by pressing the ◀ or ▶ button.

➢ SRS WOW is a trademark of SRS Labs, Inc.
WOW technology is incorporated under license from SRS labs, Inc.

Selecting the Sound Mode (depending on the model)

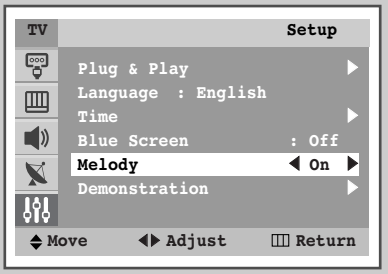
The "DUAL I-II" button displays/controls the processing and output of the audio signal. When power is switched on, the mode is automatically preset to either "DUAL-I" or "STEREO", depending on the current transmission.



	Type of broadcast	On-screen indication
NICAM Stereo	Regular broadcast (Standard audio)	**MONO** (Normal use)
	Regular + NICAM Mono	**MONO** ↔ **MONO** **NICAM** (Normal)
	NICAM Stereo	**STEREO** ↔ **MONO** **NICAM** (Normal)
	NICAM Dual-I/II	**DUAL-I** → **DUAL-II** → **Mono** **NICAM** **NICAM** (Normal)
A2 Stereo	Regular broadcast (Standard audio)	**MONO** (Normal use)
	Bilingual or Dual-I/II	**DUAL-I** ↔ **DUAL-II**
	Stereo	**STEREO** ↔ **MONO** (Forced mono)

- If the receiving conditions deteriorate, listening will be easier if the mode is set to the **MONO**.
- If the stereo signal is weak and an automatic switching occurs, then switch to the **MONO**.
- When receiving a mono sound in the AV mode, connect to the "AUDIO-L" input connector on the panel (front or side). If the mono sound comes out only from left speaker, press the **DUAL I-II** button.

Selecting the Melody



You can hear clear melody sound when the television is powered on or off.

1	Press the **MENU** (▥) button. Result: The main menu is displayed.
2	Press the ▲ or ▼ button to select **Setup**. Result: The options available in the **Setup** group are displayed.
3	Press the **ENTER** (↵) button.
4	Press the ▲ or ▼ button to select **Melody**.
5	To activate this feature, select **On** by pressing the ◀ or ▶ button.

Setting and Displaying the Current Time

You can set the television's clock so that the current time is displayed by pressing the "INFO (▭)" button. You must also set the time if you wish to use the automatic on or off timers.

➢ When pressing the "⏻" button (On/Off) on the front of the television, the clock setting will be reset.

1 Press the **MENU** (▥) button.

Result: The main menu is displayed.

2 Press the ▲ or ▼ button to select **Setup**.

Result: The options available in the **Setup** group are displayed.

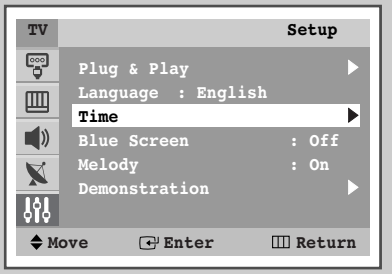
3 Press the **ENTER** (↵) button.

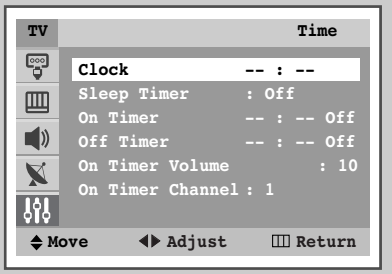
4 Press the ▲ or ▼ button to select **Time**.

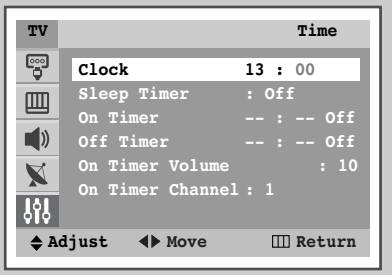
5 Press the **ENTER** (↵) button.

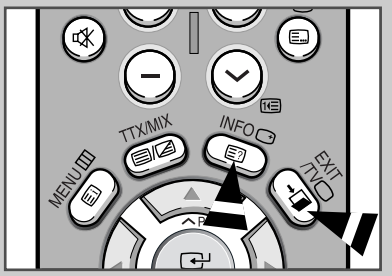
Result: The **Clock** is selected.

6 Press the ◀ or ▶ button to move to the hour or minute. Set the hour or minute by pressing the ▲ or ▼ button.

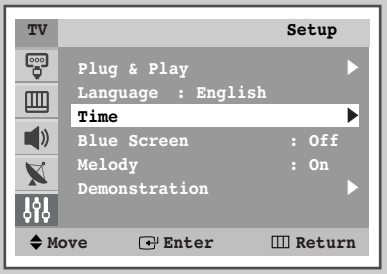


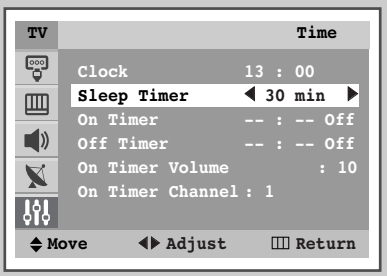


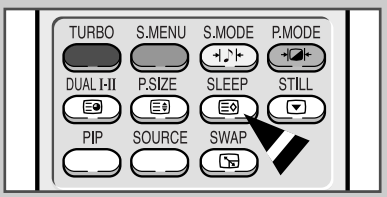




Setting the Sleep Timer







You can set your TV to automatically turn off after a preset interval.

1	Press the **MENU** (▥) button. Result: The main menu is displayed.
2	Press the ▲ or ▼ button to select **Setup**. Result: The options available in the **Setup** group are displayed.
3	Press the **ENTER** (↵) button.
4	Press the ▲ or ▼ button to select **Time**.
5	Press the **ENTER** (↵) button. Result: The **Clock** is selected.
6	Press the ▲ or ▼ button to select **Sleep Timer**.
7	Select the preset time interval (**Off**, **30 min**, **60 min**, **90 min**, **120 min**, **150 min**, **180 min**) for staying on by pressing the ◀ or ▶ button.

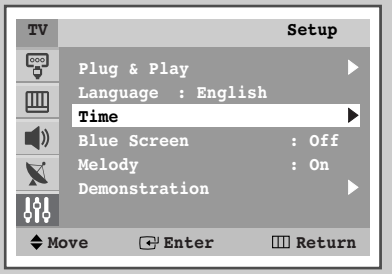
➢ You can select a time period of between 30 and 180 minutes after the television automatically switches to Standby mode by pressing the **SLEEP (⏲)** button.

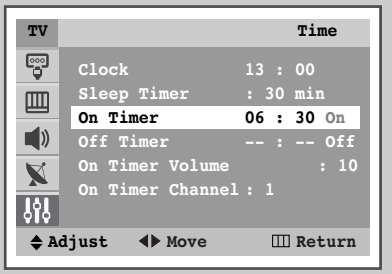
Switching the Television On and Off Automatically

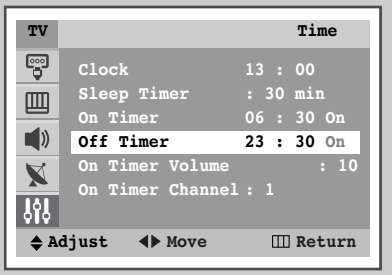
You can set the On/Off timers so that the television will:

- ***Switch on automatically and tune to the channel of your choice at the time you select***
- ***Switch off automatically at the time you select***

➢ The first step is to set the television's clock (refer to "Setting and Displaying the Current Time" on the page 31). If you have not yet set the clock, the message **Set the clock first.** is displayed.







1 Press the **MENU** (▥) button.

Result: The main menu is displayed.

2 Press the ▲ or ▼ button to select **Setup**.

Result: The options available in the **Setup** group are displayed.

3 Press the **ENTER** (↵) button.

4 Press the ▲ or ▼ button to select **Time**.

5 Press the **ENTER** (↵) button.

Result: The **Clock** is selected.

6 Press the ▲ or ▼ button to select **On Timer**. Set the time at which you wish the television to be switched on automatically.

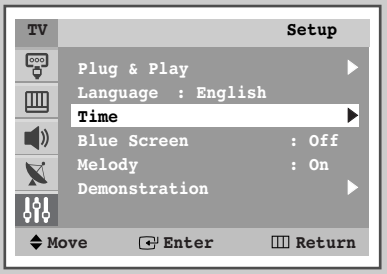
- Press the ◀ or ▶ button to move to the hour or minute. Set these by pressing the ▲ or ▼ button.
- Press the ◀ or ▶ button to move **Off** and then, press the ▲ or ▼ button to select **On**.

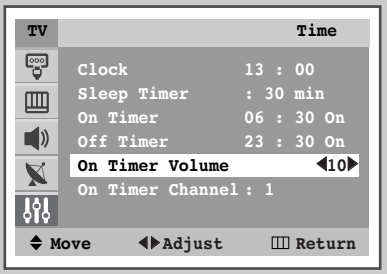
7 Press the ▲ or ▼ button to select **Off Timer**. In the same above, set the time at which you wish the television to be switched off automatically.

➢ **Auto Power Off**

When you set the timer "**On**", the television will eventually turn off, if no controls are operated for 3 hours after the TV was turned on by timer. This function is only available in timer "**On**" mode and prevents overheating or leakages, which may occur if a TV is on for too long (when you are on vacation, for example).

Setting the Preferred Volume Level/Channel





The preferred volume and channel can be set for when the timer automatically turns on the TV.

1	Press the **MENU** (▥) button. Result: The main menu is displayed.
2	Press the ▲ or ▼ button to select **Setup**. Result: The options available in the **Setup** group are displayed.
3	Press the **ENTER** (↵) button.
4	Press the ▲ or ▼ button to select **Time**
5	Press the **ENTER** (↵) button. Result: The **Clock** is selected.
6	Press the ▲ or ▼ button to select **On Timer Volume**.
7	Press the ◄ or ► button to adjust volume level.
8	Press the ▲ or ▼ button to select **On Timer Channel**.
9	Press the ◄ or ► button to select the channel.

Viewing an External Signal Source/Edit Name (depending on the model)

Use the remote control to switch between viewing signal from connected equipment, such as VCR, DVD, Set-Top-boxes and the TV source (broadcast or cable).

1 Press the **MENU** (▥) button.

Result: The main menu is displayed.

2 Press the **ENTER** (↵) button to select **Input**.

Result: The options available in the **Input** group are displayed.

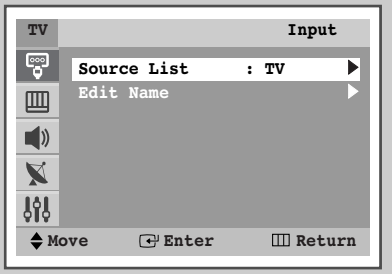
3 Press the **ENTER** (↵) button again to select **Source List**.

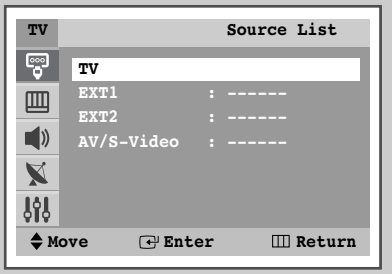
Result: The options available in the **Source List** group are displayed.

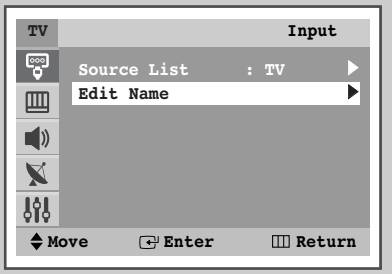
4 Press the ▲ or ▼ button to select signal source, then press the **ENTER** (↵) button.

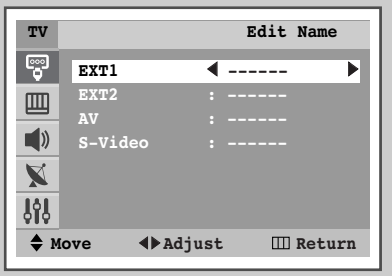
➢ When you connect equipment to the TV, you can choose between the following sets of jacks : **EXT1** or **EXT2** on the TV's rear panel, and **AV/S-Video** on the TV's side panel.

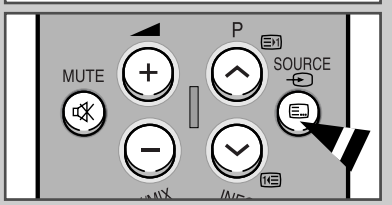
➢ You can also set these options simply by pressing the **SOURCE** (⇥) button. If you change the external source while viewing, pictures might take a short period of time to be switched.











Edit Name

1 Press the **MENU** (▥) button.

Result: The main menu is displayed.

2 Press the **ENTER** (↵) button to select **Input**.

Result: The options available in the **Input** group are displayed.

3 Press the ▲ or ▼ button to select **Edit Name**.
Press the **ENTER** (↵) button.

Result: The options available in the **Edit Name** group are displayed.

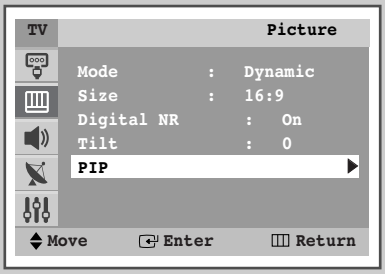
4 Press the ▲ or ▼ button to select external device : **EXT1** - **EXT2** - **AV** - **S-Video**.

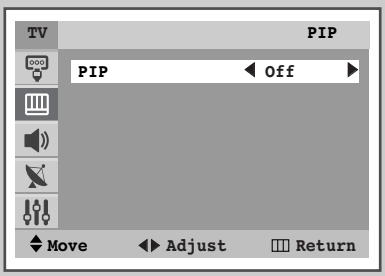
5 Press the ◀ or ▶ button.

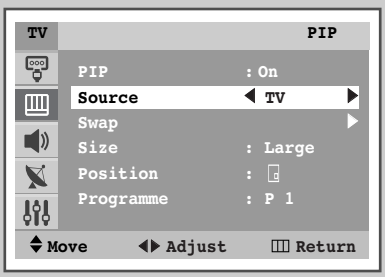
6 Select the name by pressing the ◀ or ▶ button.

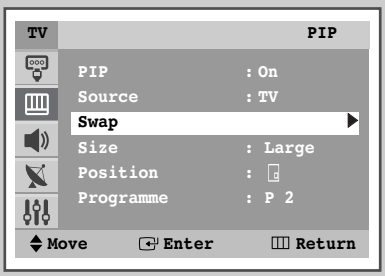
7 Set other signal sources (**EXT1**, **EXT2**, **AV**, **S-Video**) using the same method as listed above.

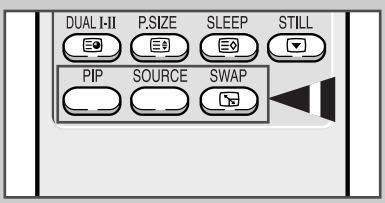
Viewing the Picture In Picture (PIP) (depending on the model)











You can display a sub picture within the main picture of TV program or external A/V devices such as VCR or DVD. In this way you can watch TV program or monitor the video input from any connected devices while watching TV or other video input.

1 Press the **MENU** (▥) button.

Result: The main menu is displayed.

2 Press the ▲ or ▼ button to select **Picture**.

Result: The options available in the **Picture** group are displayed.

3 Press the **ENTER** (↵) button.

4 Press the ▲ or ▼ button to select **PIP**. Press the **ENTER** (↵) button.

5 Press the ◀ or ▶ button to **On**.

Result: The options available in the **PIP** group are displayed.

➢ You can also activate the PIP simply by pressing the **PIP** button. To deactivate, press it again.

6 Press the ▲ or ▼ button to select **Source**.

7 Press the ◀ or ▶ button to select a source of sub picture.

Result: The sources are displayed in the following order:

TV - EXT1 - EXT2 - AV/S-Video

➢ The PIP picture can be viewed only when a source different from the main picture's is selected in the PIP window.

8 Press the ▲ or ▼ button to select **Swap**.

9 Press the **ENTER** (↵) button.

Result: The main picture and the sub picture are interchanged.

➢ You can also interchange the main picture and the sub picture simply by pressing the **SWAP** (⇆) button.

Viewing the Picture In Picture (PIP) (depending on the model) (continued)

10 Press the ▲ or ▼ button to select **Size**.

11 Select a size of sub picture by pressing the ◀ or ▶ button.

Result: The sizes are displayed in the following order:

Large - Small - 3 PIP - 4 PIP - 12 PIP

➢ **3 PIP/4 PIP/12 PIP** : You can view up to 3,4, or 12 memorizer channels on the sub picture spontaneously.

➢ You can select these options simply by pressing the **SIZE** button.

12 Press the ▲ or ▼ button to select **Position**.

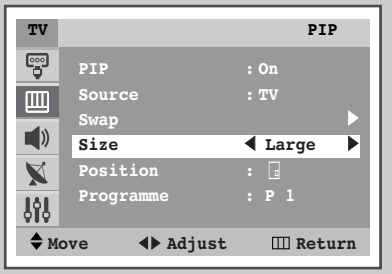
13 Press the ◀ or ▶ button.

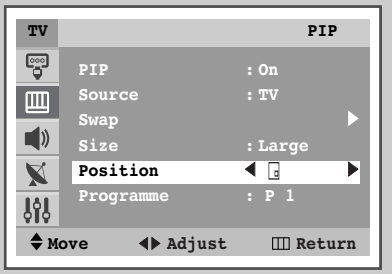
Result: The positions available are displayed.

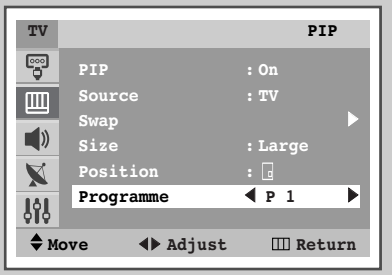
➢ You can select these options simply by pressing the (Position) button.

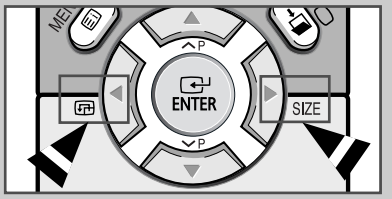
14 Press the ▲ or ▼ button to select **Programme**. You can select the channel that you want to view through sub picture by pressing the ◀ or ▶ button.

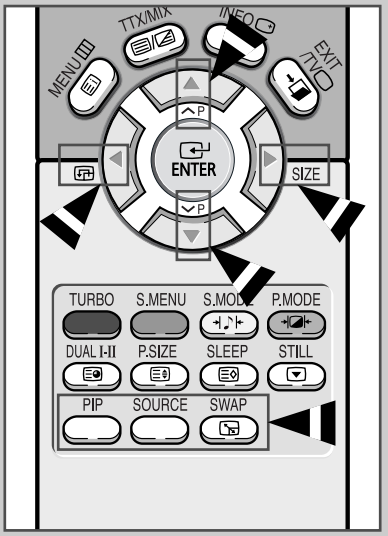
➢
- When the **Source** is set to **TV**, you can select the channel of sub picture.
- You can select the channel of the sub picture simply by pressing the ▲ or ▼ button.











Easy functions of remote control

Buttons	Feature
PIP	Used to activate or deactivate the PIP function directly.
SWAP	Used to interchange the main picture and the sub picture. ➢ When the main picture is in the Video mode and the sub picture is in the TV mode, you might not hear the sound of main picture when pressing the **SWAP** button after changing the sub picture channel. At this time, reselect the channel of main picture.
SOURCE	Used to assign a source of sub picture (**TV**, **EXT1**, **EXT2**, **AV/S-Video**).
SIZE	Used to select a size of sub picture (**Large**, **Small**, **3 PIP**, **4 PIP**, or **12 PIP**).
(Position)	Used to move the sub picture counterclockwise.
P ∧/∨	Used to select the channel of sub picture.

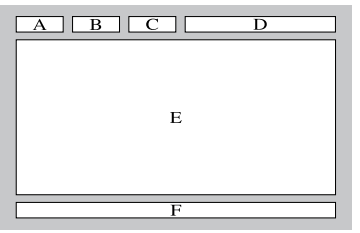
Teletext Feature

Most television channels provide written information services via teletext. Information provided includes:

- ***Television programme times***
- ***News bulletins and weather forecasts***
- ***Sports results***
- ***Travel information***

The teletext pages are organized according to six categories:

Part	Contents
A	Selected page number.
B	Broadcasting channel identity.
C	Current page number or search indications.
D	Date and time.
E	Text.
F	Status information. FASTEXT information.



➢ It can be diffrent from depending on TTX source.

➢ Teletext information is often divided between several pages displayed in sequence, which can be accessed by:

- Entering the page number
- Selecting a title in a list
- Selecting a coloured heading (FASTEXT system)

Displaying the Teletext Information

You can display Teletext information at any time on your television.

☛ For Teletext information to be displayed correctly, channel reception must be stable; otherwise:

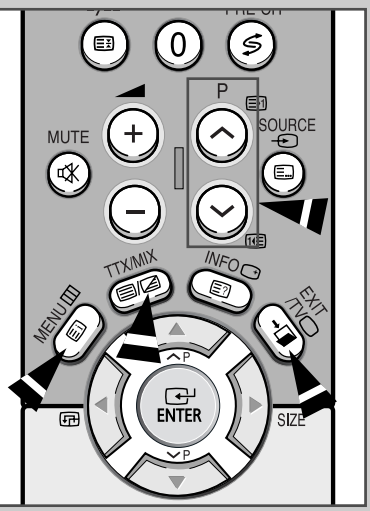
- Information may be missing
- Some pages may not be displayed

1 Select the channel providing the Teletext service using the ⌃ or ⌄ button.

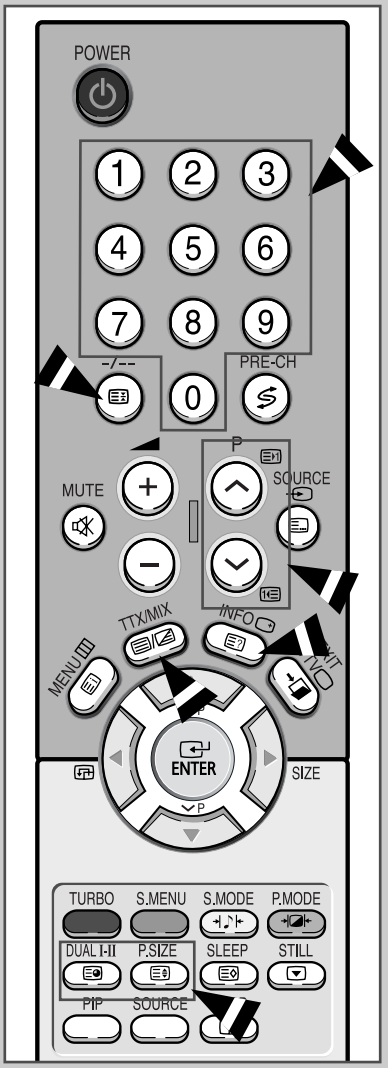
2 Press the **TTX/MIX** (▤/◪) button to activate the teletext mode.
Result: The contents page is displayed. It can be redisplayed at any time by pressing the ▤ (index) button.

3 If you wish to display the actual broadcast at the same time as the teletext page, press the **TTX/MIX** (▤/◪) button again.

4 Press the **TV** (▢) button to exit from the teletext display.



Selecting a Page by Number



You can enter the page number directly by pressing the numeric buttons on the remote control.

1 Enter the three-digit page number given in the content by pressing the corresponding numeric buttons.

Result: The current page counter is incremented and the page is then displayed.

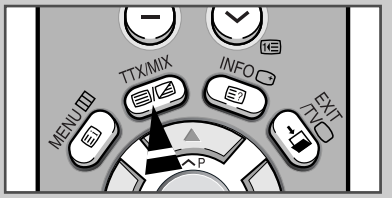
2 If the selected page is linked with several secondary pages, the secondary pages are displayed in sequence. To freeze the display on a given page, press the (hold). Press the (hold) again to resume.

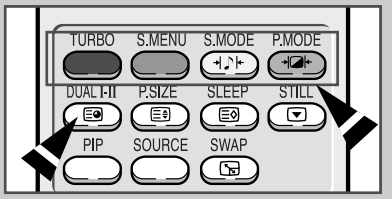
Using the various display options:

To display...	Press the...
◆ Both teletext information and the normal broadcast	**TTX/MIX** (/) twice
◆ Hidden text (answers to quiz games, for example)	(reveal)
◆ The normal screen	(reveal) again
◆ A secondary page, by entering its 4-digit number	(sub-page)
◆ The next page	(page up)
◆ The previous page	(page down)
◆ Double-size letters in the: • Upper half of the screen • Lower half of the screen	(size) • Once • Twice
◆ Normal screen	• Three times

Using FLOF to Select a Page

The various topics included in the teletext pages are colour-coded, and can be selected by pressing the coloured buttons on the remote control.





1 Display the teletext contents page by pressing the **TTX/MIX** (▤/◪) button.

2 Press the coloured button corresponding to the topic that you wish to select;the available topics are given on the status line.

Result: The page is displayed with other coloured information that can be selected in the same way.

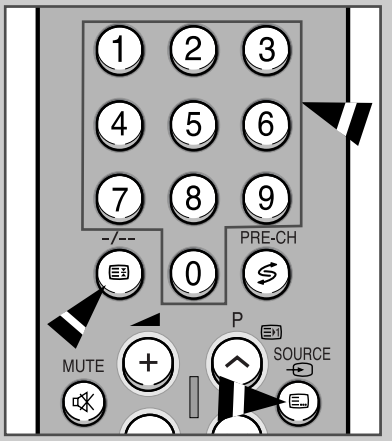
3 To display the previous or next page, press the corresponding coloured button.

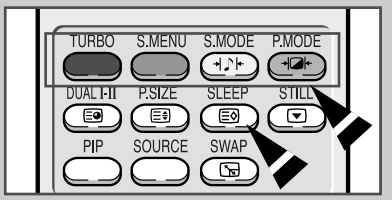
4 To display the subpage, see the following steps.

- Press the ▣ (sub-page) button.
  Result: The available subpages appear.
- Select the required sub-page. Sub-pages can be scrolled by using the **TURBO** (Red) or **S.MENU** (Green) button.

Storing Teletext Pages

You can store up to four teletext pages to display them later at leisure.





1 Select the LIST mode using the ▤ button.

Result: Four 3-digit numbers are displayed in different colours.

➢ The ▤ button is used to switch between the LIST and FLOF (or FASTEXT) modes.

2 Press the coloured button corresponding to the page that will be replaced.

3 Enter the new page number using the numeric buttons.

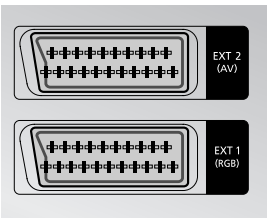
4 Repeat steps **2** and **3** for each page to be stored, using a different coloured button each time.

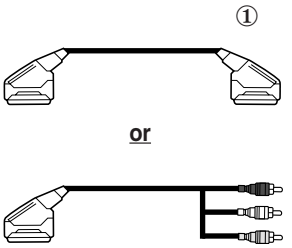
5 Press the ▣ (store) button until the corresponding blocks blink.

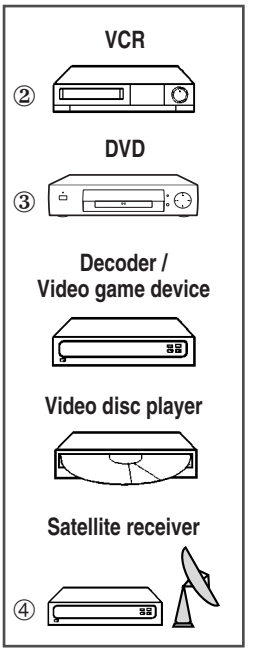
Connecting to the External Input/Outputs (depending on the model)

➢ "**EXT 1 (RGB)**" is used for the equipment with an RGB output, such as video game devices or video disc players.

Rear of the TV







① This end can be fitted with:
- A SCART connector
- Three RCA connectors (Video + Audio-L and R)

② If you have a second VCR and wish to copy cassettes tape, connect the source VCR to "**EXT 1 (RGB)**" and the target VCR to "**EXT 2 (AV)**" so that you can redirect the signal from "**EXT 1 (RGB)**" to "**EXT 2 (AV)**".

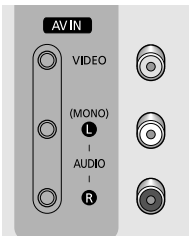
③ If you have a decoder, connect the decoder to the VCR and the VCR to the television.

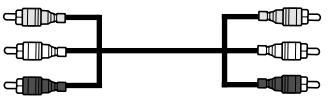
④ When you wish to record a programme, connect the receiver to "**EXT 1 (RGB)**" and the VCR to "**EXT 2 (AV)**" so that you can redirect the signal from "**EXT 1 (RGB)**" to "**EXT 2 (AV)**".

Connecting to the RCA Input (depending on the model)

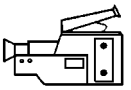
➢ The RCA (**VIDEO** and **AUDIO-L+R**) connectors are used for equipment, such as camcorders, video disc players, and some video game devices.

Side of the TV

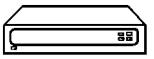




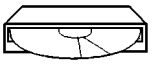
Camcorder



Video game device



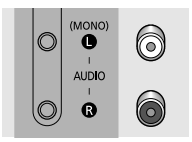
Video disc player



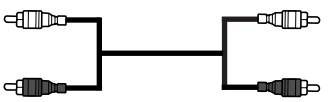
Connecting to the S-Video Input (depending on the model)

➢ The **S-VIDEO** and RCA (**AUDIO-L+R**) connectors are used for equipment with an S-Video output, such as a camcorder or VCR.

Side of the TV

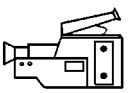


①

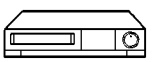


and

Camcorder



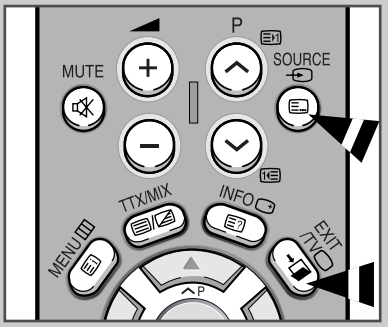
VCR



① To play pictures and sound, both the **S-VIDEO** and RCA connectors must be used.

☛ Whenever you connect an audio or video system to your television, ensure that all elements are switched off. Refer to the documentation supplied with your equipment for detailed connection instructions and associated safety precautions.

Viewing Pictures From External Sources



Once you have connected up your various audio and video systems, you can view different sources by selecting the appropriate input.

1 Check that all the necessary connections have been made.

2 Switch your television on, then press the **SOURCE** (⇥) button repeatedly.

Result: The input sources are displayed in the following order:

EXT1 - EXT2 - AV/S-Video

➢ Depending on the source selected, the pictures may appear automatically.

➢ To watch television programmes again, press the **TV** (▭) button and select the number of the channel required.

Automatic Degaussing to Remove Colour Patches

A degaussing coil is mounted around the picture tube, so you do not normally need to degauss the television manually.

If you move the television to a different position and colour patches appear on the screen, you must:

- **Switch the television off by pressing the "⏻" (On/Off) button on the front panel**
- **Unplug the television from the wall socket**
- **Leave the television power-off for about 30 minutes so that the automatic degauss function can be activated, and then press the "POWER (⏻)" button on the remote control.**

☛ **If your television will be left unattended, press the "⏻" (On/Off) button to turn your television off.**

Troubleshooting: Before Contacting Service Personnel

Before contacting Samsung after-sales service, perform the following simple checks.

If you cannot solve the problem using the instructions below, note the model and serial number of the television and contact your local dealer.

No sound or picture	◆ Check that the mains lead has been connected to a wall socket. ◆ Check that you have pressed the "⏻" button (On/Off) and the **POWER** (⏻) button. ◆ Check the picture contrast and brightness settings. ◆ Check the volume.
Normal picture but no sound	◆ Check the volume. ◆ Check whether the **MUTE** (🔇) button on the remote control has been pressed.
No picture or black and white picture	◆ Adjust the colour settings. ◆ Check that the broadcast system selected is correct.
Sound and picture interference	◆ Try to identify the electrical appliance that is affecting the television, then move it further away. ◆ Plug your television into a different mains socket.
Blurred or snowy picture, distorted sound	◆ Check the direction, location and connections of your aerial. This interference often occurs due to the use of an indoor aerial.
Remote control malfunctions	◆ Replace the remote control batteries. ◆ Clean the upper edge of the remote control (transmission window). ◆ Check the battery terminals.

Memo

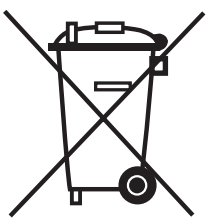
Memo

– AFTER SALES SERVICE

– Do not hesitate to contact your retailer or service agent if a change in the performance of your product indicates that a faulty condition may be present.

SAMSUNG

ELECTRONICS



Correct Disposal of This Product

(Waste **E**lectrical & **E**lectronic **E**quipment**)**

(Applicable in the European Union and other European countries with separate collection systems)

This marking shown on the product or its literature, indicates that it should not be disposed with other household wastes at the end of its working life. To prevent possible harm to the environment or human health from uncontrolled waste disposal, please separate this from other types of wastes and recycle it responsibly to promote the sustainable reuse of material resources.
Household users should contact either the retailer where they purchased this product, or their local government office, for details of where and how they can take this item for environmentally safe recycling.
Business users should contact their supplier and check the terms and conditions of the purchase contract. This product should not be mixed with other commercial wastes for disposal.

AA68-03660A-00